

### **REMARKS**

Claims 1-6 and 12-17, as amended, and new claims 18-25 are pending in this application. In this Response, Applicants have amended certain claims. In light of the Office Action, Applicants believe these amendments serve a useful clarification purpose, and are desirable for clarification purposes, independent of patentability. Accordingly, Applicants respectfully submit that the claim amendments do not limit the range of any permissible equivalents.

In particular, independent claims 1 and 12 have been amended in a manner discussed with the Examiner in order to clarify the invention. Claims 7-11 have been canceled accordingly. In addition, claims 18-25 have been added to recite additional embodiments of the invention, which are fully supported by the grandparent application no. 09/721,749, filed November 27, 2000.

As no new matter has been added, Applicants respectfully request entry of these amendments at this time.

### **THE INTERVIEW**

Applicants appreciate the courtesies extended by the Examiner during the interview held on July 19, 2005. The claim amendments and arguments herein are substantially in accord with the discussion during the interview. In addition, Applicants submit an Information Disclosure Statement to formally disclose the existence of litigation regarding the parent patent (6,818,705). As discussed during the interview, included in the opposing counsel's allegations regarding the '705 patent is an invalidity argument based on references considered by the Examiner both in the '705 patent and the present application.

### **THE REJECTIONS UNDER 35 U.S.C. §§ 102 & 103**

Claims 1-2, 5-7, 9, and 11 were rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under §103(a) as obvious over U.S. Patent No. 5,980,396 to Moriyama *et al.* for the reasons set forth on pages 2-3 of the Office Action. In addition, claims 1-2, 5-7, 9, and 12-17 were rejected under § 103(a) as obvious over U.S. Patent No. 6,210,293 to Sullivan in view of U.S. Patent No. 5,697,856 to Moriyama *et al.* for the reasons stated on page 3 of the Office Action. Finally, claims 3 and 4 were rejected under § 103 as obvious over U.S. Patent No. 6,315,684 to Binette *et al.* or U.S. Patent No. 6,419,594 to Nesbitt *et al.* in view of U.S. Patent No. 5,697,856 to

Moriyama et al. for the reasons stated on pages 3-4 of the Office Action. None of the cited references disclose or suggest the present invention for at least the reasons that follow.

Claim 1 now recites a cis-to-trans catalyst including a metal organosulfur compound (as previously recited in claim 7). While the examples in the Moriyama '396 patent do include diphenyl disulfide (*see* Table 1), Moriyama is completely silent as to other cis-to-trans catalysts, especially the metal organosulfur compound presently recited. Moreover, the Moriyama '396 patent lacks any disclosure regarding cis-to-trans conversion of the polybutadiene rubber based on the use of diphenyl disulfide. Based on this silence with regard to claimed features of the invention, one of ordinary skill in the art would not have been motivated to modify the Moriyama core composition to include anything other than diphenyl disulfide absent the use of impermissible hindsight.<sup>1</sup> For at least this reason, Applicants respectfully submit that Moriyama '396 does not anticipate or render obvious the invention presently recited in independent claims 1 and 12 and those claims depending therefrom.

With regard to the rejection based on the combination of Sullivan and Moriyama '856, Applicants respectfully submit that the combination does not disclose or suggest the present invention. For example, as previously discussed, claim 1 now features a metal organosulfur compound as the cis-to-trans catalyst, which is not even suggested by the Sullivan / Moriyama '856 combination. In fact, as recognized by the Examiner, Sullivan does not disclose or suggest cis-to-catalysts in the core composition and, thus, the Examiner has turned to Moriyama '856 for its disclosure of catalyst. Like Moriyama '396, however, the Moriyama '856 patent does not disclose or suggest a metal organosulfur compound, but rather discloses only sulfides as suitable catalysts. Col. 2, lines 46-54. As such, the combination of Sullivan and Moriyama '856 also does not render obvious the invention recited in independent claim 1.

Furthermore, the Moriyama '856 patent teaches away from the amount of trans-isomer in the reaction product featured in claim 12. For example, the Moriyama '856 patent teaches that the trans structure after vulcanization *must* be within the range of 10 percent to 30 percent and further explains that "when the amount of trans structure *exceeds* 30 percent, the core is too soft and the resilience performances are deteriorated." Col. 3, lines 27-33 (emphasis added). As such, the Moriyama '856 patent does not disclose or suggest a reaction product having a trans-polybutadiene

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<sup>1</sup> It appears that the Examiner also recognizes the deficiencies of the cited reference with respect to the presently recited type of cis-to-trans catalyst based on the absence of rejection of previously recited claim 8.

isomer content of greater than about 32 percent. Thus, one of ordinary skill in the art would have lacked any motivation to make a core with the trans-isomer content recited in claim 12 (and those depending therefrom) without the present invention to use as a template.

Finally, the Binette / Nesbitt and Moriyama '856 combination does not render obvious claims 3-4. Similar to Sullivan, the primary references Binette and Nesbitt lack the inclusion of an organosulfur cis-to-trans catalyst and, as a result, the Examiner has relied upon Moriyama '856 for its disclosure of catalyst. Office Action at Pages 3-4. As discussed above, the Moriyama '856 patent is completely silent as to a metal organosulfur compound for use as a cis-to-trans catalyst (as presently recited in claim 1 of the instant application). As such, the combination of Binette and Moriyama '856 or Nesbitt and Moriyama '856 does not render obvious the invention recited in claims 3-4.

In light of the explanation above, Applicants respectfully submit that none of the cited references disclose or suggest the present invention. Consequently, Applicants respectfully request reconsideration and withdrawal of the rejections based thereon.

### **THE DOUBLE PATENTING REJECTION**

The Examiner rejected claims 1-21 under the judicially created doctrine of obviousness-type double patenting as obvious over claims 1-50 of the grandparent patent no. 6,486,261 to Wu *et al.* and claims 1-22 of parent patent no. 6,818,705 to Wu *et al.* In addition, claims 1-21 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting based on co-pending U.S. Patent Application Nos. 10/694,800, 10/694,754, 10/694,798, and 10/694,801. Applicants submit herewith a Terminal Disclaimer in compliance with 37 C.F.R. § 1.321(c) in order to overcome the double patenting rejections based on the parent and grandparent patents and co-pending patent applications. As such, Applicants respectfully request that the double patenting rejection be withdrawn.

With regard to the obviousness-type double patenting rejection of claims 1-17 based on claims 1-62 of U.S. Patent No. 6,465,578 to Bissonnette *et al.*, Applicants respectfully disagree with the Examiner's rationale for rejection. First, as set forth in MPEP § 804(2)(B)(1), the disclosure of a patent may not be used as prior art when considering whether the invention defined in a claim of an application is an obvious variation of the invention defined in the claim of a patent. MPEP § 804(2)(B)(1). While the Examiner is not precluded from using the patent disclosure of the '578

patent, only select portions of the Written Description may be used for an obviousness-type double patenting analysis. Indeed, the Written Description can be used to learn the meaning of a term in a claims of the '578 patent. *In re Boylan*, 392 F.2d 1017 (CCPA 1968). In addition, the Examiner may consider portions of the Written Description that provide direct support for the patent claims in the '578 patent. *In re Vogel*, 422 F.2d 438, 441-442 (CCPA 1970). It appears in this case, however, that the Examiner is using the disclosure of the '578 patent for more than claim interpretation or direct support.

### CONCLUSION

All claims are believed to be in condition for allowance. If the Examiner believes that the present amendments still do not resolve all of the issues regarding patentability of the pending claims, Applicants invite the Examiner to contact the undersigned attorneys to discuss any remaining issues.

A Petition for Extension of Time is submitted herewith to extend the time for response one month to and including August 15, 2005. A Fee Sheet Transmittal is submitted to pay for this extension, the Terminal Disclaimer, and the Information Disclosure Statement. No other fees are believed to be due at this time. Should any fee be required, however, please charge such fee to Swidler Berlin LLP Deposit Account No. 195127, Order No. 20002.0368.

Respectfully submitted,  
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